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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/779,819	Applicant(s) KIM, HYUNG-KYOON	
	Examiner LaTanya Bibbins	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 28, 2008 has been entered.

2. In the remarks filed on January 31, 2008, Applicant amended claims 1, 4, 5, and 10, and submitted arguments for allowability of pending claims 1-13.

Response to Arguments

3. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new grounds of rejection.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "recording apparatus," the "data eraser/recorder," and the "controller" recited in claims 10 and 13 must be shown or the features canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. ***Claim 5-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.***

7. **Claim 5** recites the limitation "the partially recording." There is insufficient antecedent basis for this limitation in the claim. In the interest of compact prosecution Examiner will interpret "the partially recording" as "the recording."

Dependent claims 6-9 do not resolve the 35 U.S.C. 112 first paragraph issues of independent claim 5 recited above and are therefore rejected as incorporating the deficiencies of a claim upon which they depends.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (herein AAPA) in view of Idobuchi (US PGPub Number 2004/0130992 A1).**

Regarding claim 1, AAPA discloses a method of recording data on an optical disc in an Incremental Recording mode in which data is partially recordable, the method comprising:

determining whether the optical disc is formatted and recording data on the optical disc upon determining that the optical disc is not formatted (see Figure 1 and the discussion in paragraph [0008] where a "conventional Incremental Recording mode" is described particularly the discussion regarding operations 100 and 102) and

checking a state of the optical disc in a recording management area in which disc information is recorded (see Figure 1 and the discussion in paragraph [0008] regarding operation 101).

AAPA fails to disclose, while Idobuchi discloses

erasing, after the checking and after recording the data, data ranging from a next writable address to a predetermined block upon determining that the optical disc is a Minimal Blank disc in which data is erased from the recording management area to a lead-in area (see Figures 1 and 2 and the discussion in paragraphs [0028]-[0031]).

Additionally, Idobuchi further discloses the claimed invention except for that recording a remainder of the data other than the recorded data, is performed prior to the erasing (see Figure 5 ST3 and ST4 and the discussion in paragraphs [0028]-[0031] and [0039]) versus after the erasing as claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that modifying the teachings of Idobuchi to record a remainder of the data other than the recorded data, after the erasing would yield a predictable result. One of ordinary skill in the art at the time the invention was made would have recognized that the modification would improve similar methods in the same way.

Regarding claim 2, AAPA further discloses wherein the determining further comprises outputting a recording error message upon determining that the optical disc is formatted (see operation 103 in Figure 1 and the discussion in paragraph [0008]).

Regarding claim 3, Idobuchi further discloses, wherein the erasing comprises recording, after the checking of the state, data from a next address upon determining

that the optical disc is a Minimal Blank disc in which data is erased from the recording management area to a lead-out area (see Figures 1 and 2 and the discussion in paragraphs [0028]-[0031]).

Claim 4 is drawn to the computer readable medium corresponding to the method claimed in claim 1. Therefore computer readable medium claim 4 corresponds to method claim 1, and is rejected for the same reason of obviousness as used above.

Regarding claim 5, AAPA discloses a method of recording data on an optical disc in an Incremental Recording mode, the method comprising:

determining whether the optical disc is formatted (see Figure 1 and the discussion in paragraph [0008] where a “conventional Incremental Recording mode” is described particularly the discussion regarding operation 1002); and

recording data to the optical disc at a desired position upon determining that the optical disc is not formatted (see Figure 1 and the discussion in paragraph [0008] where a “conventional Incremental Recording mode” is described particularly the discussion regarding operation 102).

AAPA fails to disclose, while Idobuchi discloses

checking whether the optical disc is Fully Blanked or Minimally Blanked after the recording (see Figure 3 particularly the “additional recording after Minimally Blank process” and the discussion in paragraphs [0027] and [0028]); and

erasing, after the checking, data from a portion of the optical disc that may lead to a recording or read out error upon determining that the optical disc is Minimally Blanked (see Figures 1 and 2 and the discussion in paragraphs [0028]-[0031]).

Additionally, Idobuchi further discloses the claimed invention except for that recording the remaining data other than the recorded data at the desired address on the optical disc is performed prior to the erasing (see Figure 5 ST3 and ST4 and the discussion in paragraphs [0028]-[0031] and [0039]) versus after the erasing as claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that modifying the teachings of Idobuchi to record the remaining data other than the recorded data, after the erasing would yield a predictable result. One of ordinary skill in the art at the time the invention was made would have recognized that the modification would improve similar methods in the same way.

Regarding claim 6, Idobuchi further discloses wherein the checking comprises checking a recording management area to determine whether the disc is Fully Blanked or Minimally Blanked (paragraphs [0025]-[0027]).

Regarding claim 7, Idobuchi further discloses wherein data ranging from a next writable address to a predetermined block is erased in said erasing (paragraphs [0028] and [0031]).

Regarding claim 8, AAPA further discloses outputting an error message upon determining that the optical disc is formatted (see operation 103 in Figure 1 and the discussion in paragraph [0008]).

Regarding claim 9, Idobuchi further discloses recording, after the checking step, data from a next address upon determining that the optical disc is Minimally Blanked (see Figures 1-3, particularly the “additional recording after Minimally Blank process” shown in Figure 3, and the discussion in paragraphs [0028]-[0031]).

Regarding claim 10, AAPA discloses an apparatus for recording data on a Minimally Blanked optical disc in an Incremental Recording mode, the apparatus comprising:

AAPA discloses a controller that determines whether the optical disc is formatted or unformatted, outputs a signal to the data eraser/recorder to partially record the first data to the optical disc upon determining that the optical disc is not formatted, determines whether the optical disc is fully blanked or minimally blanked (see Figure 1 and operations 100-102).

Idobuchi however, discloses a data eraser/recorder that, in response to a signal, records first data to a desired portion of the optical disc or erases data from a portion of the optical disc that may lead to a recording or read out error (see the optical pickup, element 10 of Figure 4 and the discussion in paragraph [0038]) and

wherein, after the data eraser/recorder partially records data to the optical disc, the controller outputs a signal to the data eraser/recorder to erase second data from a portion of the optical disc that may lead to a recording or read out error upon determining that the disc is minimally blanked (see Figures 1-3 and the discussion in paragraphs [0028]-[0031] and [0038]).

Idobuchi further discloses the claimed invention except that

the controller outputs a signal to the data eraser/recorder to record a remaining portion of the first data if upon determining that the disc is fully blanked or if before the second data is erased (see Figure 5 ST3 and ST4 and the discussion in paragraphs [0028]-[0031] and [0039]) versus after the second data is erased as claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that modifying the teachings of Idobuchi to record a remaining portion of the first data after the second data is erased would yield a predictable result. One of ordinary skill in the art at the time the invention was made would have recognized that the modification would improve similar methods in the same way.

Regarding claim 11, Idobuchi further discloses wherein the desired portion of the disc is designated by a write start address and the portion of the optical disc from which second data is erased is the next writable address to a predetermined block (see Figures 1-3 and the discussion in paragraphs [0028] and [0031]).

10. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (herein AAPA) in view of Idobuchi (US PGPub Number 2004/0130992 A1), as applied to claim 10 above, and further in view of Lee (US Patent Number 7,106,665 B2).

Regarding claim 12, the combination of AAPA and Idobuchi do not explicitly disclose, but Lee does disclose wherein the controller checks a value designated at a Field 0 of a recording management area of the optical disc to determine whether the optical disc is formatted or unformatted (column 4 lines 37-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supplement the teachings of AAPA and Idobuchi and check a value designated at a Field 0 of a recording management area of the optical disc to determine whether the optical disc is formatted or unformatted, as disclosed by Lee. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings in order to notify the user of the error.

Allowable Subject Matter

12. Claim 13 is allowed.

Claim 13 is allowable for the reasons indicated in the previous Office Action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571)270-1125. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2627

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LaTanya Bibbins/
Examiner, Art Unit 2627

/Wayne R. Young/
Supervisory Patent Examiner, Art Unit 2627